

L. L. C. FOWLER, JR., GENERAL COUNSEL COLIN K. LINEBERRY, DIRECTOR HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

OIL AND GAS DOCKET NO. 01-0267764

THE APPLICATION OF PROFIELD SERVICES, INC. FOR A COMMERCIAL DISPOSAL PERMIT PURSUANT TO STATEWIDE RULE 9 IN THE GOOD LEASE, WELL NO. 1, PEARSALL (AUSTIN CHALK) FIELD, FRIO COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

Gene Montes - Legal Examiner

#### **APPEARANCES:**

APPLICANT:

REPRESENTING:

Doug Dashiell

David M. Klatt Chris Surles Pro Field Services, Inc.

#### **COMMISSION STAFF:**

David Cooney Doug Johnson

**Technical Permitting** 

#### PROCEDURAL HISTORY

Application Filed:

July 10, 2010

Request for Hearing:

September 21, 2010

Notice of Hearing:

October 15, 2010

Date of Hearing:

November 23, 2010

Record Closed:

November 23, 2010

Proposal For Decision Issued:

January 3, 2011

## **EXAMINERS' REPORT AND PROPOSAL FOR DECISION**

## STATEMENT OF THE CASE

Pro Field Services, Inc. ("Pro Field") requests commercial disposal authority pursuant to Statewide Rule 9 for the Good Lease, Well No. 1, in the Pearsall (Austin Chalk) Field, Frio County, Texas.

Notice of the subject application was published in the *Frio-Nueces Current*, a newspaper of general circulation in Frio County, on April 22, 2010. Notice of the application was sent to the Frio County Clerk, offset operators within ½ mile and to the surface owners of each tract which adjoins the disposal tract on July 6, 2010.

On October 6, 2010 Commission staff administratively denied a commercial disposal permit pursuant to Statewide Rule 9 because the subject well had received a Statewide Rule 13-B2 exception and did not have surface casing set through the base of the useable quality groundwater. Commission staff appeared at the hearing to request denial of the commercial disposal application. No operator or landowner appeared to protest the application and the surface owner, Chris Surles, submitted a letter and made a statement at the hearing in support of the application.

The examiners recommend that the application for a commercial disposal permit pursuant to Statewide Rule 9 be approved.

## **DISCUSSION OF THE EVIDENCE**

## **Applicant's Evidence**

The Good Lease, Well No. 1, was drilled to a total depth of 7,128 feet in September 1985 and completed as an open hole Austin Chalk producing well from 6,575 feet to 7,128 feet. The well is located on a 199 acre tract adjacent to and east of County Road 4675. FM 117 intersects County Road 4675 and runs along the north side of the disposal tract. The tract is large, relatively flat and open and is situated approximately 3 miles northwest of the city of Dilley, Texas.

Pro Field plans to plug off the Austin Chalk completion by setting a CIBP at 6,500 feet. The well has 8 %" surface casing set at 732 feet that is cemented to the surface with 260 sacks. The 5 ½" production casing is set at 6,575 feet and is cemented to the surface with 952 sacks. The well will be equipped with 2 7/8" tubing with a packer set at 4,590 feet (See attached Pro Field Exhibit No. 13 - Wellbore Diagram).

The proposed disposal interval is the Olmos and San Miguel formations between 4,600 feet and 6,000 feet. Pro Field requests a maximum injection volume of 20,000 barrels per day with an average injection volume expected to be 5,000 barrels per day. The requested maximum surface injection pressure is 2,300 psig.

The Texas Commission on Environmental Quality ("TCEQ") recommends that usable-quality ground water be protected to a depth of 3,350 feet below the land surface. There is 1,250 feet of impermeable shale and clay between the top of the proposed injection interval at 4,600 feet and the base of usable quality water at 3,350 feet. Pro Field submitted a TCEQ letter dated April 29, 2010, which stated that injection into the proposed injection interval will not harm usable quality water.

There are no wells located within the ¼ mile radius of review for the proposed disposal well. There is one producing horizontal well, three plugged horizontal wells and one plugged vertical dry hole located within the ½ mile radius of review. All of the wells are properly plugged or cased and cemented in such a manner to protect the fresh water resources and prevent the migration of fluids from the injection interval.

Pro Field submitted a map which included Frio County and the surrounding counties of Zavala, Dimmit, La Salle McMullen and Atascosa. The map depicted the active producing Austin Chalk, San Miguel and Eagle Ford wells and showed that there were only fourteen active commercial disposal wells in the six counties listed above. In Frio County, there were only four active commercial disposal wells, but these wells were for private use only and were unavailable for use by Pro Field.

Pro Field submitted a yearly tabulation of W-1 drilling permits for the six county area from 1995 through November 18, 2010. The lowest number of permits issued was in 1999 with just over 100 permits. The highest number of permits issued is year to date in 2010 with over 700 permits. Pro Field also submitted a tabulation of wait times for its disposal trucks at three disposal facilities in La Salle and Atascosa Counties from August 1, 2010, through November 12, 2010. The tabulation showed a cumulative wait time of 406 hours with an average wait time of over three hours. Pro Field believes that additional disposal facilities are necessary to accommodate the Eagle Ford development that is ongoing in the area.

## **The Facility**

The area surrounding the proposed injection facility is rural ranching and farming land. Access to the proposed disposal facility will be off of County Road 4675 which is a paved two lane public highway. Pro Field already has a yard where it stores its disposal trucks at the intersection of FM 117 and County Road 4675. The surface facility will comply with all permit conditions requested by the Commission staff and will be of sufficient size to allow trucks access without having to wait on the highway. At an average injection rate of 5,000 BWPD, there will be approximately 40 trucks per day accessing the facility. Pro Field stated that a disposal well at the proposed location would reduce the daily haul distance for its trucks.

Pro Field currently operates three commercial disposal wells and submits that it has the expertise to build and manage the proposed facility. Pro Field has a current approved Form P-5 (Organization Report), a posted \$25,000 financial assurance bond and no pending Commission enforcement actions.

## **Commission Staff's Evidence**

Commission staff appeared at the hearing to request denial of the commercial disposal application. The staff stated that a new policy had been implemented in July 2010

to administratively deny any commercial disposal permit when the subject well had received a Statewide Rule 13-B2 exception and did not have surface casing set through the base of the useable quality groundwater. The staff believes that commercial disposal wells that have received a Statewide Rule 13-B2 exception posed a greater risk to the useable quality groundwater, even though the long string is required to be cemented to the surface. Staff also recognized that no problems have been reported to date on these types of disposal wells which have been approved prior to July 2010.

The staff had also reviewed the Form W-15 Cementing Report for the 5 ½" production casing. Although the form reported that 10 barrels of cement had been circulated to the surface, the reported height of cement was only 6,477 feet. Staff felt that this was not enough cement to circulate cement to surface on 6,575 feet of production casing when accounting for borehole washouts which would normally require 20% excess cement.

## **Applicant's Rebuttal Evidence**

Pro Field believes that prior to July 2010 the Commission staff would have administratively approved their application. Pro Field opined that the change in Commission policy unfairly denied Pro Field's application and was done with no written policy, T-Bar Memo or notice to operators. In addition, the Commission's web site still contained documentation allowing commercial disposal wells that had received a Statewide Rule 13-B2 exception, as long as, the operator performed annual mechanical integrity testing on the disposal well.

Pro Field submitted a tabulation of all of the active or applied for commercial disposal permits in Frio County. There have been eight permits issued administratively by Commission staff and all eight permitted wells had received a Statewide Rule 13-B2 exception and did not have surface casing set through the base of the useable quality groundwater. Pro Field noted that no problems have been reported to date in these disposal wells.

Pro Field's engineering expert also disputed the allegation that not enough cement had been used to circulate cement to the surface. He believed that the cement height had been incorrectly reported on the W-15 Form and submitted a calculation of the cement yield based on the number of sacks used. His calculation showed that the yield accounted for 36% excess cement and he stated that this was a reasonable amount of excess cement to circulate 10 barrels of cement to the surface, as was reported on the W-15 Form.

Pro Field stated that it would not consider a recommendation to be adverse for the Commission to require that Pro Field run a cement bond log to confirm the 5 ½" production casing cement integrity. Additionally, Pro Field agreed to run annual mechanical integrity tests.

#### **EXAMINERS' OPINION**

The examiners recommend approval of the application for commercial disposal authority. Although the Good Lease, Well No. 1, has a Statewide Rule 13-B2 exception and does not have surface casing set through the base of the useable quality groundwater, both the surface and production casings are cemented to the surface. Injected fluids will be confined to the injection interval by over 1,250 feet of impermeable shale and clay between the top of the injection interval and the base of usable quality water. Finally, there are no wellbores in the ½ mile area of review and only one producing horizontal well, three plugged horizontal wells and one plugged vertical dry hole located within the ½ mile radius of review. All of the wells are properly plugged or cased and cemented in such a manner to protect the fresh water resources and prevent the migration of fluids from the injection interval.

All of the commercial disposal permits in Frio County have received a Statewide Rule 13-B2 exception and do not have surface casing set through the base of the useable quality groundwater. Since no problems have been reported to date in these disposal wells, the examiners believe that there is no evidence that disposal wells that have a Statewide Rule 13B2 exception present a greater risk of contamination to the useable quality groundwater.

Approval of the application is in the public interest. The Eagle Ford development area encompasses Frio County and the surrounding counties of Zavala, Dimmit, La Salle, McMullen and Atascosa and disposal wells are the best means for disposing of produced frac and salt water. Pro Field has shown that the proposed disposal well is necessary to provide needed capacity for disposal of produced water from numerous wells drilled and produced within hauling distance of the Good Lease, Well No. 1. There are only four active commercial disposal wells in Frio County, and the wells are for private use only and are unavailable for use by Pro Field. In addition, there are over three hour wait times at the existing disposal facilities accessed by Pro Field.

A yearly tabulation of W-1 drilling permits for the six county area from 1995 through November 18, 2010 showed the lowest number of permits issued was in 1999 with just over 100 permits. The highest number of permits issued is year to date in 2010 with over 700 permits. Additional disposal facilities are necessary to accommodate the Eagle Ford development that is ongoing in the area.

Because the proposed injection well will be close to Pro Field's yard, use of the well for disposal of produced water will reduce traffic and use of public highways for hauling produced water to a disposal site. The surface facility will be newly constructed and of sufficient size to accommodate trucks hauling water to the facility without creating a traffic hazard on the highway that provides access to the facility. Compliance with permit conditions will minimize the risk of spills at the facility and will prevent the migration of any spills that occur, thereby protecting both ground and surface water.

The examiners recommend that the application for a commercial disposal permit pursuant to Statewide Rule 9 be approved and that the Commission adopt the following Findings of Fact and Conclusions of Law.

#### FINDINGS OF FACT

- 1. Notice of this application and hearing was provided to all persons entitled to notice. Notice of the subject application was published in the *Frio-Nueces Current*, a newspaper of general circulation in Frio County, on April 22, 2010.
- 2. Notice of the application was sent to the Frio County Clerk, offset operators within ½ mile and to the surface owners of each tract which adjoins the disposal tract on July 6, 2010.
- 3. The proposed injection into the Good Lease, Well No. 1, will not endanger useable quality water.
  - a. The TCEQ recommends that usable-quality ground water be protected to a depth of 3,350 feet below the land surface.
  - b. The Good Lease, Well No. 1, was drilled to a total depth of 7,128 feet in September 1985 and completed as an open hole Austin Chalk producing well from 6,575 feet to 7,128 feet.
  - c. The well has 8 %" surface casing set at 732 feet that is cemented to the surface with 260 sacks.
  - d. There is 1,250 feet of impermeable shale and clay between the top of the proposed injection interval at 4,600 feet and the base of usable quality water at 3,350 feet.
- 4. The proposed injection into the Good Lease, Well No. 1, will not endanger production from other oil, gas or mineral bearing formations.
  - a. Pro Field plans to plug off the Austin Chalk completion by setting a CIBP at 6,500 feet.
  - b. The 5 ½" production casing is set at 6,575 feet and is cemented to the surface with 952 sacks.
  - c. The well will be equipped with 2 7/8" tubing with a packer set at 4,590 feet.

- d. There are no wells located within the ¼ mile radius of review for the proposed disposal well.
- e. There is one producing horizontal well, three plugged horizontal wells and one plugged vertical dry hole located within the ½ mile radius of review. All of the wells are properly plugged or cased and cemented in such a manner to protect the fresh water resources and prevent the migration of fluids from the injection interval.
- f. Pro Field will run a cement bond log to confirm the 5 ½" production casing cement integrity and perform annual mechanical integrity tests.
- 5. Use of the Good Lease, Well No. 1, as a commercial disposal well is in the public interest because it will reduce hauling distances and will provide needed commercial disposal capacity for wells being drilled, completed and produced in the area of the proposed facility.
  - a. In Frio County and the surrounding counties of Zavala, Dimmit, La Salle, McMullen and Atascosa, there are only fourteen active commercial disposal wells.
  - b. There are only four active commercial disposal wells in Frio County, and the wells are for private use only and are unavailable for use by Pro Field.
  - c. A yearly tabulation of W-1 drilling permits for the six county area from 1995 through November 18, 2010 showed the lowest number of permits issued was in 1999 with just over 100 permits. The highest number of permits issued is year to date in 2010 with over 700 permits.
  - d. There are over three hour wait times at the existing disposal facilities accessed by Pro Field.
  - e. A disposal well at the proposed location will reduce the daily haul distance for Pro Field's trucks.
  - f. Additional disposal facilities are necessary to accommodate the Eagle Ford development that is ongoing in the area.
- 6. Use of the Good Lease, Well No. 1, for commercial disposal of produced salt water will not create a traffic safety hazard.

- a. The proposed disposal well is located on a 199 acre tract adjacent to and east of County Road 4675. Access to the proposed disposal facility will be off of County Road 4675 which is a paved two lane public highway.
- b. FM 117 intersects County Road 4675 and runs along the north side of the disposal tract. Pro Field already has a yard where it stores its disposal trucks at the intersection of FM 117 and County Road 4675.
- c. The area surrounding the proposed injection facility is rural ranching and farming land and the 199 acre proposed disposal tract is large, relatively flat and open.
- d. The surface facility will be of sufficient size to ensure saltwater haulers using the site for disposal will not have to form a line on the highway at the entrance to the facility.
- e. The highway on either side of the entrance and exit driveways of the facility is straight for a sufficient distance to ensure adequate visibility of trucks entering and exiting the facility by drivers of other vehicles using the highway.
- 7. Pro Field has a current approved Form P-5 (Organization Report), a posted \$25,000 financial assurance bond and no pending Commission enforcement actions.

#### **CONCLUSIONS OF LAW**

- 1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.
- 2. All things necessary to give the Railroad Commission jurisdiction to consider this matter have occurred.
- 3. Approval of the application will not harm useable quality water resources, will not endanger oil, gas, or geothermal resources, will promote further development in the area of Frio County and is in the public interest pursuant to Sec. 27.051 of the Texas Water Code.
- 4. Pro Field Services, Inc. has met its burden of proof and its application satisfies the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

## **EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the application of Pro Field Services, Inc. for commercial disposal authority in its Good Lease, Well No. 1, be approved, as set out in the attached Final Order.

Respectfully submitted,

Gene Montes Legal Examiner Richard P. Athus.
Richard D. Atkins, P.E.
Technical Examiner